## 1161-05-216 **Ross Berkowitz** and **Pat Devlin\*** (patrick.devlin@yale.edu). Central limit laws in majority dynamics (and a proof that bribing three voters suffices). Preliminary report.

Let V be a set of N vertices, half of which are initially colored red and half are colored blue. At each time step, all of the vertices simultaneously update their color to match the majority opinion among their neighbors. We examine the evolution of this process when the underlying graph is chosen from G(N, p) and show that giving one color (say blue) a lead of size O(1/p) can lead to every vertex being blue within four steps. We also prove a central limit theorem for the number of vertices of each color after the first step. (Received August 17, 2020)